

Reconsideration of the application is respectfully requested.

I. AMENDMENT

Please make the following amendments:

In the Claims:

Please amend claim 44 as follows:

Prior art
44. (Once Amended) An intravascular device for use with a catheter having a detachment apparatus, said device comprising:

at least one lead element; and

a trailing element detachably interconnected to at least one said lead element, said trailing element adapted for attachment to said detachment apparatus;

wherein said at least one lead element is structured to cause [capable of causing] occlusion of a vessel.

II. RESPONSE TO FINAL OFFICE ACTION

Claim 44 has been amended. Support for the amendment to claim 44 is found throughout the specification and in the claims as originally filed (for example, *see* page 14, lines 1-3; page 15, lines 17-18; and page 19, line 19 to page 20, line 2). No new matter is added.

A. Examiner Interview

Applicant wishes to thank Examiner Lewis for granting an interview with Applicant's Representative, William W. Enders, on October 20, 1998 in which the Final Office Action was discussed. During the interview, the rejection of claims 44-54 was discussed.

During the interview, the 35 U.S.C. § 112, second paragraph rejection of claims 44-54 was discussed. In view of MPEP 2173.05(g), Examiner Lewis agreed to withdraw the 35 U.S.C. § 112, second paragraph rejection of claims 44-54.

During the interview, the 35 U.S.C. § 102(b) rejection of claim 44 as being anticipated by Lahille *et al.* was also discussed. Applicant's Representative argued that the limitation that a lead element capable of causing occlusion of a vessel is not disclosed in Lahille.

Examiner Lewis agreed to consider an amendment to claim 44 in which the terms "capable of causing occlusion" are replaced with language indicating that the lead element is structured to cause occlusion.

B. The 35 U.S.C. § 112, Second Paragraph Rejection of Claims 44-54

The Examiner rejected claims 44-54 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regard as the invention. Specifically, the Examiner states that "[c]laim 44 is indefinite for there is not enough structure for the claimed function of the at least one lead element being detachable from the trailing element" (*see* page 3 of the Final Office Action). Applicant traverses this rejection and respectfully submits that the claims as filed meet the requirements of 35 U.S.C. § 112, second paragraph.

The entire structure of the invention need not be recited in the claim. There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper (*see* MPEP 2173.05(g) *citing In re Swinehart*, 439 F.2d 210, 169 U.S.P.Q. 226 (C.C.P.A. 1971)). Furthermore, the language in claim 44 of “a trailing element detachably interconnected to at least one lead element” is similar to the language used in some examples set forth in MPEP 2173.05(g) which comply with 35 U.S.C. § 112, second paragraph. For example, limitations such as “members adapted to be positioned” and “portions . . . being resiliently dilatable whereby said housing may be slidably positioned” were found by one court “to precisely define present structural attributes of interrelated component parts of the claimed assembly.” *In re Venezia*, 530 F.2d 956, 189 U.S.P.Q. 149 (C.C.P.A. 1976). Therefore, Applicant respectfully submits that the limitation “detachably interconnected” of claim 44 is perfectly acceptable because it sets definite boundaries on the patent protection sought. *See In re Barr*, 444 F.2d 588, 170 U.S.P.Q. 33 (C.C.P.A. 1971).

The Examiner also states that “the structural relationship between the first and second elements is not clearly presented” (*see* page 3 of the Final Office Action). Claim 44 recites that the “trailing element” is “detachably interconnected to at least one said lead element.” This relationship is described in the Specification on Page 19, lines 13-18:

In this particular device shown, the detachment apparatus would have a loop on the end which would engage a hook on the proximal part of the coil [trailing element 402], pulling it back into the catheter to the point where the detachment portion was near the end of the catheter. When the coil then was introduced to the detachment point [408], further retraction on the detachment apparatus core would cause detachment of the proximal [402] from the distal component of the intravascular device.

Applicant also points out that, for purposes of written description, the claims only need to allow persons of ordinary skill in the art to recognize what is claimed, and that it is not the function of the claims to describe every possible dimension of a claimed feature (*see Orthokinetics Inc. v. Safety Travel Chairs, Inc.*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986)). Therefore, Applicant respectfully submits that given the description set forth in the Specification, one of ordinary skill in the art may easily determine the structural relationship between the first and second elements.

In view of the above arguments, Applicant respectfully submits that the 35 U.S.C. § 112, second paragraph rejection of claims 44-54 should be withdrawn. Favorable reconsideration is requested.

C. The Obviousness-Type Double Patenting Rejection of Claims 44-64

The Examiner has rejected claims 44-64 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 5,443,478 ('478).

As stated in the Action, a timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(c) may be used to overcome a rejection based on non-statutory double patenting (*see* page 2 of the Final Office Action). In this regard, a properly executed terminal disclaimer is enclosed herewith. However, Applicant points out that the filing of a terminal disclaimer to obviate a rejection based on non-statutory double patenting is not an admission of the propriety of the

rejection. *Quad Environmental Technologies Corp. vs. Union Sanitary District*, 20 U.S.P.Q.2d 1392 (Fed. Cir. 1991). The Court in *Quad* indicated that:

"filing of a terminal disclaimer simply serves the statutory function of removing the rejection of double patenting, and raises neither a presumption nor estoppel on the merits of the rejection."

The terminal disclaimer included herewith meets the requirements set forth in 37 C.F.R. § 1.321. The terminal disclaimer is proper as the '478 patent and the present application are commonly owned, and the executed disclaimer includes the provision that any patent granted on this application shall be enforceable only for and during such period that the patent is commonly owned with the '478 patent.

Accordingly, in light of the present terminal disclaimer, the obviousness-type double patenting rejection of claims 44-64 is believed to be overcome. Favorable reconsideration is requested.

D. The Rejection of Claim 44 as Anticipated Under 35 U.S.C. § 102(b) by Lahille *et al.*

The Examiner has rejected claim 44 as being anticipated under 35 U.S.C. § 102(b) by U. S. Patent No. 4,957,501 to Lahille *et al.* Applicant respectfully traverses this rejection.

Claim 44 recites an intravascular device comprising at least one lead element detachably interconnected to a trailing element, wherein the lead element is structured to cause occlusion of a vessel.

To support a rejection under § 102(b), the cited prior art must disclose each and every element of the rejected claim. In this regard, Applicant notes that Lahille does not disclose a lead

element structured to cause occlusion of a vessel. Thus, independent claim 44 is not anticipated by Lahille.

Furthermore, claim 44 is not obvious over Lahille. Lahille relates to a filter device that “is particularly for implantation in the interior vena cava . . . to arrest the migration of all thrombi of dangerous size” (*see* Abstract), and Lahille states that this occurs “without interrupting the blood flow rate, the filter itself not being thrombogenic” (*see* col. 7, lines 15-20). In contrast, the subject claim recites at least one lead element detachably interconnected to a trailing element, the lead element *structured to cause occlusion of a vessel*. Therefore, not only does Lahille teach away from the occlusive or thrombosis-producing capability recited in the subject claim, but use of occlusive or thrombosis-causing elements would render the device of Lahille unsuitable for its intended purpose.

In summary, Applicant respectfully submits that claim 44 is not anticipated nor obvious over the cited art. Favorable reconsideration is requested.

E. Conclusion

In view of the above remarks, Applicant respectfully submits that claims 44-64 are in condition for allowance. Reconsideration of the application and claims is courteously solicited.